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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/759,153

01/16/2001

Ghassan Naim

59864.00548

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32294

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02/15/2006

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EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/759,153

Applicant(s)

NAIM ET AL.

Examiner

Toan D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/25/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 6 is objected to because of the following informalities:

In claim 6 line 2, it is suggested to change "a transmit buffer" to --- the transmit buffer ---.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1, 9, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the length of the data queue" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "said base station" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "the data queue" in line 3. There is insufficient antecedent basis for this limitation in the claim.

### ***Allowable Subject Matter***

3. The indicated allowability of claims 11-12 is withdrawn in view of the newly discovered reference(s) to Ishida et al. (US 6,975,604). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (EP 0981229 A2) in view of Chuah (US 6,285,665) further in view of Basu et al. (U.S. Patent 6,097,733).

For claims 1, 2 and 7, Hwang et al. disclose controlling asymmetric dynamic radio bearers in mobile packet data communications system, comprising:

monitoring the length of data queue in the first network elements as an indication of future need of communication resources in said first network element (figure 1, Abstract lines 14-16 and page 3, col. 4 lines 18-25);

sending the indication from the first network element to the controller (page 3, col. 4 lines 18-25 and col. 4 lines 51-53);

controlling the communication resources between the first network element and the second network element based on this indication (Abstract lines 1-9, page 2, col. 2 line 18 to page 3 line 1).

However, Hwang et al. do not explicitly disclose wherein the indication is a coded value of the length of the data queue. In an analogous art, Chuah discloses wherein the indication is a coded value of the length of the data queue (col. 34 lines 28-29).

One skilled in the art would have recognized a coded value of the length of the data queue, and would have applied Chuah's uplink/downlink transmission ratio in Hwang et al.'s mobile station transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chuah's method for establishment of the power level for uplink data transmission in a multiple access system for communications networks in Hwang et al.'s controlling asymmetric dynamic radio bearers in mobile packet data communications system with the motivation being to dynamically adjust the uplink/downlink ratio based on the total uplink/downlink queue size information (col. 34 lines 33-35).

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Furthermore, Hwang et al. in view of Chuah do not expressly disclose a controller for the second network element (base station means). In an analogous art, Basu et al. disclose a controller for the second network element (figure 2, col. 2 lines 58-60). Basu et al. disclose further wherein the first network element is connected to the controller by way of the second network element (col. 7 lines 29-33 as set forth in claim 2); wherein the first network element is a mobile station and the second network element is

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a base station of a wireless communication network (figure 1, col. 4 lines 55-62 as set forth in claim 7).

One skilled in the art would have recognized a controller for the second network element (base station means) to use the teachings of Basu et al. in the system of Hwang et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the controller for the second network element as taught by Basu et al. in Hwang et al.'s system with the motivation being included a wired Internet connection that provides access to the Internet, a public switched telephone system connection and a wireless service interface that facilitates the voice communications and the multimedia communications within the service area (col. 2 lines 58-65).

For claim 3, Hwang et al. disclose wherein the indication includes information about a transmit buffer of the first network element (page 2, col. 2 lines 23-44).

For claim 4, Hwang et al. disclose wherein the indication includes information on the additional resources needed for said first network element (figure 4, page 2, col. 2 lines 28-34 and page 5, col. 7 lines 9-36).

For claim 5, Hwang et al. disclose controlling asymmetric dynamic radio bearers in mobile packet data communications system, comprising:

monitoring an indication of future need of communication resources in said first network element (figure 1, page 3, col. 4 lines 18-25);

sending the indication from the first network element to the controller (page 3, col. 4 lines 18-25 and col. 4 lines 51-53);

controlling the communication resources between the first network element and the second network element based on this indication (Abstract lines 1-9, page 2, col. 2 line 18 to page 3 line 1).

However, Hwang et al. do not explicitly disclose wherein the indication includes coded value corresponding to predefined resources. In an analogous art, Chuah discloses wherein the indication includes coded value corresponding to predefined resources (col. 34 lines 28-29).

One skilled in the art would have recognized the coded value corresponding to predefined resources, and would have applied Chuah's uplink/downlink transmission ratio in Hwang et al.'s mobile station transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chuah's method for establishment of the power level for uplink data transmission in a multiple access system for communications networks in Hwang et al.'s controlling asymmetric dynamic radio bearers in mobile packet data communications system with the motivation being to dynamically adjust the uplink/downlink ratio based on the total uplink/downlink queue size information (col. 34 lines 33-35).

Furthermore, Hwang et al. in view of Chuah do not expressly disclose a controller for the second network element (base station means). In an analogous art, Basu et al. disclose a controller for the second network element (figure 2, col. 2 lines 58-60).

One skilled in the art would have recognized a controller for the second network element (base station means) to use the teachings of Basu et al. in the system of Hwang et al. Therefore, it would have been obvious to one of ordinary skill in the art at

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the time of the invention, to use the controller for the second network element as taught by Basu et al. in Hwang et al.'s system with the motivation being included a wired Internet connection that provides access to the Internet, a public switched telephone system connection and a wireless service interface that facilitates the voice communications and the multimedia communications within the service area (col. 2 lines 58-65).

For claim 6, Hwang et al. disclose wherein the indication includes information about a transmit buffer of the first network element (figure 4, page 2, col. 2 lines 28-34 and page 5, col. 7 lines 9-36).

4. Claims 8-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basu et al. (U.S. Patent 6,097,733) in view of Hwang et al. (EP 0981229 A2) further in view of Chuah (US 6,285,665).

For claim 8, Basu et al. disclose system and associated method of operation for managing bandwidth in a wireless communication system supporting multimedia communications, comprising:

a plurality of first stations (figure 1, col. 4 lines 55-57);

a second station connected to said plurality of first stations through a plurality of communication links (figure 1, col. 4 lines 54-62);

a controller for controlling the allocation of said communication resources among said links (figure 2, col. 7 lines 11-28);



said allocation being performed in accordance with information transmitted from said first stations which indicates a need for communication resources (figure 7, col. 12 line 1 to col. 13 line 3).

However, Basu et al. do not expressly disclose based on the lengths of data queues in the first stations. In an analogous art, Hwang et al. disclose based on the lengths of data queues in the first stations (Abstract lines 14-16 and page 3, col. 4 lines 18-25).

One skilled in the art would have recognized the lengths of data queues to use the teachings of Hwang et al. in the system of Basu et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the lengths of data queues to as taught by Hwang et al. in Basu et al. with the motivation being controlling asymmetric dynamic radio bearers in a mobile packet data communication system (Abstract).

Furthermore, Basu et al. in view of Hwang et al. do not expressly disclose wherein the information is a coded value of the length of the data queues. In an analogous art, Chuah discloses wherein the information is a coded value of the length of the data queues (col. 34 lines 28-29).

One skilled in the art would have recognized a coded value of the length of the data queues, and would have applied Chuah's uplink/downlink transmission ratio in Basu et al.'s communication system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chuah's method for establishment of the power level for uplink data transmission in a multiple access system for communications networks in Basu et al.'s system and associated method of operation for managing bandwidth in a wireless communication system supporting

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multimedia communications with the motivation being to dynamically adjust the uplink/downlink ratio based on the total uplink/downlink queue size information (col. 34 lines 33-35).

For claim 9, Basu et al. disclose wherein said controller is part of said base station (figure 2, col. 2 lines 58-60 and col. 7 lines 11-16).

For claim 10, Basu et al. disclose wherein said first stations are mobile stations in a wireless network (figure 1, col. 4 lines 55-57).

For claim 13, Basu et al. do not expressly disclose wherein said indication is provided for each data block transmitted. In an analogous art, Hwang et al. disclose wherein said indication is provided for each data transmitted (page 3, col. 4 lines 18-25).

However, Hwang et al. do not explicitly disclose each data block is transmitted. To include each data block transmitted would have been obvious to one of ordinary skill in the art since words, characters, or digits handled as a unit in data transmission.

One skilled in the art would have recognized wherein said indication is provided for each data block transmitted to use the teachings of Hwang et al. in the system of Basu et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use the indication is provided for each data block transmitted as taught by Hwang et al. in Basu et al.'s system with the motivation being to increase or decrease the number of the plural radio bearers established (page 3, col. 4 lines 18-25).

5. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basu et al. (U.S. Patent 6,097,733) in view of Hwang et al. (EP 0981229 A2) and Chuah (US 6,285,665) further in view of Ishida et al. (US 6,975,604).

For claims 11-12, Basu et al. disclose a data queue (col. 14 line 2). However, Basu et al. in view of Hwang et al. do not expressly disclose generating a code representative of the length of the data queue. In an analogous art, Chuah discloses generating a code representative of the length of the data queue (col. 34 lines 28-29).

One skilled in the art would have recognized generating a code representative of the length of the data queue, and would have applied Chuah's uplink/downlink transmission ratio in Hwang et al.'s mobile station transmission. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chuah's method for establishment of the power level for uplink data transmission in a multiple access system for communications networks in Hwang et al.'s controlling asymmetric dynamic radio bearers in mobile packet data communications system with the motivation being to dynamically adjust the uplink/downlink ratio based on the total uplink/downlink queue size information (col. 34 lines 33-35).

Furthermore, Basu et al. in view of Hwang et al. and Chuah do not expressly disclose:

- a data generator;

- an encoder;

- a transmitter for transmitting said data with said code included therein as a field.

In an analogous art, Ishida et al. disclose:

- a data generator (figure 6, reference 617);

- an encoder (figure 6, reference 616);

a transmitter (figure 6, reference 634) for transmitting said data with said code included therein as a field (col. 8 lines 37-43). Ishida et al. disclose wherein said base station includes a receiver (figure 5, reference 533-1) for receiving a transmission and producing data (col. 8 lines 10-25);

a decoder (figure 5, reference 505) for decoding a field of said data and producing an indication of the data queue in an associated first station (col. 8 lines 10-25);

wherein said controller receives said information from said decoder and allocates communication resources in accordance therewith (col. 8 lines 10-25 as set forth in claim 12).

One skilled in the art would have recognized the data generator, and would have applied Ishida et al.'s mobile station in Basu et al.'s communication system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Ishida et al.'s base station controller and mobile station in Basu et al.'s system and associated method of operation for managing bandwidth in a wireless communication system supporting multimedia communications with the motivation being to generate data into frames (col. 8 lines 58-60).

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida et al. (US 6,975,604) further in view of Chuah (US 6,285,665).

For claims 14-15, Ishida et al. disclose base station controller and mobile station comprising:

a receiver (figure 5, reference 533);

a decoder (figure 5, reference 505) for decoding;

a controller (figure 5, reference 507) for controlling allocation of communication resources, wherein said decoder (figure 5, reference 505) provides information for the at least one mobile station to the controller (col. 8 lines 10-25). Ishida et al. disclose further a data generator (figure 6, reference 617); a data queue (figure 7, reference 727); an encoder for generating the data queue (figure 6, reference 616); and a transmitter (figure 6, reference 634) for transmitting data with said code included therein as a field (col. 8 lines 37-43 as set forth in claim 15).

However, Ishida et al. do not expressly disclose a code representative of a length of the data queue in at least one mobile station and queue length. In an analogous art, Chuah discloses a code representative of a length of the data queue in at least one mobile station and queue length (col. 34 lines 28-29).

One skilled in the art would have recognized a code representative of a length of the data queue in at least one mobile station and queue length, and would have applied Chuah's uplink/downlink transmission ratio in Ishida et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Chuah's method for establishment of the power level for uplink data transmission in a multiple access system for communications networks in Ishida et al.'s base station controller and mobile station with the motivation being to dynamically adjust the uplink/downlink ratio based on the total uplink/downlink queue size information (col. 34 lines 33-35).

### ***Response to Arguments***

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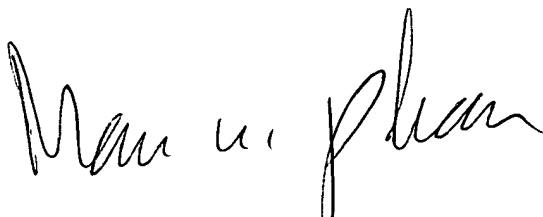
7. Applicant's arguments with respect to claims 1-15 have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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